

Utah Department of Environmental Quality Division of Solid and Hazardous Waste Fact Sheet



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CHEMICAL AGENT MUNITIONS DISPOSAL SYSTEM at the Deseret Chemical Agent Disposal Facility, Utah

MISSION

Deseret Chemical Depot stores approximately 42 percent of the U.S. chemical munition¹ stockpile. The Army constructed the Chemical Agent Munition Disposal System (CAMDS) to:

- develop and test new technology for demilitarization and disposal of toxic chemical munitions,
- develop a technical data package for use in design and construction of other similar plans,
- process the unserviceable chemical munitions and,
- assist in timely destruction of the chemical munitions stockpile.

Reverse Assembly Testing

One of CAMDS' main missions was to test the various aspects of the "reverse assembly" incineration technology. Reverse assembly essentially dismantles the munition in the "reverse" order it was manufactured and incinerates the components. Typically the munition casing, chemical agent, and the energetic material will be incinerated separately.

CAMDS Incinerators

The **Liquid Incinerator** (LIC) is used to destroy liquid chemical agents and spent decontamination solutions. The LIC is equipped with a primary and secondary combustion chamber and a pollution abatement system.

The **Metal Parts Furnace** (MPF) treats drained projectiles and bulk items contaminated by chemical agents. No explosives are fed to the MPF. The MPF is a direct-fired roller hearth furnace with an afterburner followed by a pollution abatement system.

The **Deactivation Furnace System** (DFS) incinerates rockets and mines, including fuses, explosives, and propellants from other munitions. The DFS includes a rotary kiln, a cyclone, and an afterburner followed by a pollution abatement system.

The LIC, MPF, and DFS each have independent pollution abatement systems consisting of a quench tower, a venturi scrubber, a packed-bed scrubber tower, and a demister.

OTHER TESTS

The Army continuously searches for other chemical and conventional weapon treatment methods. CAMDS conducts various tests to determine the actual feasibility of various treatment methods. For example, CAMDS is currently testing alternative methods for treating protective clothing which are best not incinerated due to the potential of those waste streams generating dioxins and furans.

Additional Information

If you would like more detailed information or have questions please contact:

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[HTTP://WWW.DEQ.STATE.UT.US/EQSHW/CDS/CDS-M-2.HTM](http://WWW.DEQ.STATE.UT.US/EQSHW/CDS/CDS-M-2.HTM)

¹ See Chemical Agent Munitions Fact Sheet